The Vegetarian Resource Group PO Box 1463 Baltimore, MD 21203

Carole Davis

Co-Executive Secretary of the Dietary Guidelines Advisory Committee Center for Nutrition Policy and Promotion U.S. Department of Agriculture 3101 Park Center Drive, Room 1034 Alexandria, VA 22302

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Comments submitted electronically at <u>www.dietaryguidelines.gov</u>

Dear Ms. Davis:

The Vegetarian Resource Group is a nonprofit educational organization that works with individuals, consumer groups, food companies, professional associations, government agencies, academic institutions, and other relevant constituencies to disseminate accurate information and sound advice to the public concerning vegetarian diets.

We appreciate the opportunity to share our ideas for the 2010 Dietary Guidelines for Americans. As advocates for people who choose to follow a vegetarian diet, we believe that the Dietary Guidelines should include information about vegetarian diets. This has been done somewhat in the past with suggestions for alternatives to meat products but information is limited. We also recommend increasing the emphasis on plant-based diets for all Americans.

More than five million adults and close to 1.6 million children (under age 18) in the United States have chosen to follow a vegetarian diet.^{1,2} A recent report by the Centers for Disease Control found that, when asked if their child followed a vegetarian diet for health reasons, close to half a million parents/guardians responded affirmatively; approximately 3.3 million adults reported following a vegetarian diet for health reasons.³ Reviews by professional organizations such as the American Dietetic Association have concluded that a well-planned vegetarian diet can be nutritionally adequate and

¹ Stahler C. How many adults are vegetarian? The Vegetarian Resource Group Web site (accessed January 20, 2009); available from http://www.vrg.org/journal/vj2006issue4/vj2006issue4poll.htm.

² Stahler C. How many youth are vegetarian? The Vegetarian Resource Group Web site (accessed January 20, 2009); available from http://www.vrg.org/journal/vj2005issue4/vj2005issue4youth.htm.

³ Barnes PM, Bloom B, Nahin RL. Complementary and Alternative Medicine Use among Adults and Children: United States, 2007. *National Health Statistics Reports, Number 12*. December 10, 2008.

provide health benefits.⁴ Adding recommendations in the guidelines that will address the nutritional needs of these vegetarians and vegans would strengthen the Dietary Guidelines. For example non-meat sources of iron and zinc and non-dairy calcium sources could be included.

Addressing nutritional needs of vegetarians would also benefit those who follow near-vegetarian eating plans or who eat several meatless meals each week. As the demographic profile of the United States changes, there is an increase in the number of population groups with eating patterns that do not conform to previous standard US patterns. Many traditional diets are plant-based and may include calcium sources other than dairy products. For example, dairy products are not typically a part of traditional Asian or African diets. Our surveys suggest that the prevalence of vegetarian diets in Hispanic adults in the United States is as high, if not higher than in white (non-Hispanic) adults. As these population groups become a larger proportion of Americans, their unique dietary features should be considered in the Dietary Guidelines.

We also encourage the Dietary Guidelines Advisory Committee to consider increasing the emphasis on choosing a plant-based diet in the 2010 Dietary Guidelines. A plant-based diet can be defined as an eating pattern characterized by a focus on whole grains, dried beans, fruits, vegetables, and nuts and seeds. These foods are all nutrient-dense and offer significant health benefits in the prevention of cardiovascular disease, hypertension, obesity, cancer, and type 2 diabetes.

The majority of research on health effects of plant-based diets has been conducted on people following vegetarian diets. A vegetarian diet is defined as one that does not contain any meat, poultry, or fish. Studies of vegetarians can provide important insights into the health effects of plant-based diets.

Key results include:

• Research in the US and the UK found that vegetarians had a lower death rate from ischemic heart disease than non-vegetarians. The American Dietetic Association's Evidence Analysis Library has concluded that there is good evidence that a vegetarian diet is associated with a lower risk of death from ischemic heart disease.

⁶ Appleby PN, Davey GK, Key TJ. "Hypertension and blood pressure among meat eaters, fish eaters, vegetarians and vegans in EPIC-Oxford." *Public Health Nutr.* 2002;5:645-654.

⁴ "Position of the American Dietetic Association and Dietitians of Canada: Vegetarian diets." J Am Diet Assoc. 2003;103:748-765.

⁵ Stahler. "How many adults?"

⁷ Fraser GE. "Associations between diet and cancer, ischemic heart disease, and all-cause mortality in non-Hispanic white California Seventh-day Adventists." *Am J Clin Nutr.* 1999;70(suppl):532S-538S.

⁸ Key TJ, Fraser GE, Thorogood M, et al. "Mortality in vegetarians and nonvegetarians: detailed findings from a collaborative analysis of 5 prospective studies." *Am J Clin Nutr.* 1999;70(suppl):516S-524S.

⁹ Evidence Analysis Library Project on Vegetarian Nutrition and Decreased Risk of Cardiovascular Disease published 2008 at http://www.adaevidencelibrary.com/topic.cfm?cat=3536 and copyrighted by the American Dietetic Association.

- Vegetarians had lower blood pressure and a lower rate of hypertension than non-vegetarians.^{10,11} Vegans (vegetarians who avoid all animal products) had the lowest blood pressure and the lowest rate of hypertension compared to lacto-ovo vegetarians, fish eaters, and meat eaters.^{12,13}
- In a Seventh-day Adventist population with a generally healthy life-style, type 2 diabetes was twice as common in non-vegetarians when compared to vegetarians.¹⁴
- A study in the UK found that overweight or obesity was twice as common in non-vegetarian men and 1.5 times as common in non-vegetarian women when compared to vegetarians. 15
- Vegetarian diets with an emphasis on plant-based foods have been used successfully to treat cardiovascular disease ^{16,17}, type 2 diabetes ¹⁸, hypertension ¹⁹, and obesity ²⁰.

These results, along with others^{21,22}, suggest that, while every American may not choose to follow a vegetarian diet, significant health benefits can be achieved by the movement towards a more plant-based diet. We hope that the committee will increasingly emphasize nutrient-dense, plant-based alternatives to high-fat meat and dairy products. In order to more clearly promote plant-based alternatives, we encourage you to develop new food groupings that will not equate plant-based protein sources like dried beans with foods like red meat that can be high in saturated and total fat and low in

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<sup>10</sup> Appleby.

<sup>11</sup> Fraser.
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¹² Appleby.

¹³ Fraser GE. "Vegetarian diets and health outcomes – what we know and where do we go from here?" Presentation at the 5th International Congress on Vegetarian Nutrition; March 4-6, 2008.

¹⁴ Fraser. "Associations."

¹⁵ Appleby PN, Thorogood M, Mann JL. "Low body mass index in non-meat eaters: the possible roles of animal fat, dietary fibre, and alcohol." *Int J Obesity*. 1998;22:454-60.

¹⁶ Koertge J, Weidner G, Elliott-Eller M, et al. "Improvement in medical risk factors and quality of life in women and men with coronary artery disease in the Multicenter Lifestyle Demonstration Project." Am J Cardiol. 2003;91:1316-1322.

¹⁷ Jenkins DJ, Kendall CW, Marchie A, et al. "Direct comparison of a dietary portfolio of cholesterol-lowering foods with a statin in hypercholesterolemic participants." *Am J Clin Nutr.* 2005;81:380-387.

¹⁸ Barnard ND, Cohen J, Jenkins DJA, et al. "A low-fat vegan diet improves glycemic control and cardiovascular risk factors in a randomized clinical trial in individuals with Type 2 diabetes." *Diabetes Care.* 2006;29:1777-1783.

¹⁹ Berkow SE, Barnard ND. "Blood pressure regulation and vegetarian diets." Nutr Rev. 2005;63:1-8

²⁰ Turner-McGrievy GM, Barnard ND, Scialli AR. "A two-year randomized weight loss trial comparing a vegan diet to a more moderate low-fat diet." *Obesity.* 2007;15:2276-2281.

²¹ Key TJ, Appleby PN, Rosell MS. "Health effects of vegetarian and vegan diets." *Proc Nutr Soc.* 2006;65;35-41.

²² Fraser GE. *Diet, Life Expectancy, and Chronic Disease. Studies of Seventh-day Adventists and Other Vegetarians*. New York, NY. Oxford University Press; 2003.

fiber. Similarly, recommendations should be for good sources of calcium and other key nutrients rather than specifically for dairy products.

In addition to more explicit support of a plant-based diet in the 2010 Dietary Guidelines, we urge the committee to clearly present health concerns with excess consumption of red meat and processed meats. For example, the American Institute for Cancer Research and the World Cancer Research Fund recently concluded that there is convincing evidence that red meat and processed meat increase the risk of cancer of the colon and rectum. There is limited evidence but a suggestion of an association between red meat intake and risk of cancer of the esophagus, lung, pancreas, and endometrium while limited evidence suggests an association between processed meat and increased risk of cancer of the esophagus, lung, stomach, and prostate. Beef consumption has also been linked to an increased risk of death from ischemic heart disease while processed meat has been linked to increased incidence of diabetes. The World Cancer Research Fund/American Institute for Cancer Research recommends that red meat intake be limited to an average consumption of no more than 300 grams a week, very little if any of which should be processed. A similar recommendation should be incorporated in the revised Dietary Guidelines.

We appreciate the committee's work on Dietary Guidelines 2010 and its solicitation of these public comments.

Sincerely,

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Charles Stahler
Co-Director, The Vegetarian Resource Group

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²³ WCRF/AICR. Food, Nutrition, Physical Activity, and the Prevention of Cancer: A Global Perspective. Washington, DC: AICR, 2007.

²⁴ WCRF/AICR.

²⁵ Fraser. "Associations."

²⁶ van Dam RM, Willett WC, Rimm EB, et al. "Dietary fat and meat intake in relation to risk of type 2 diabetes in men." *Diabetes Care*. 2002;25:417-424.

²⁷ WCRF/AICR.